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Charles E. McDowell, David P. Helmbold

December 1989 **ACM Computing Surveys (CSUR)**, Volume 21 Issue 4

Full text available: pdf(2.86 MB)

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The main problems associated with debugging concurrent programs are increased complexity, the "probe effect," nonrepeatability, and the lack of a synchronized global clock. The probe effect refers to the fact that any attempt to observe the behavior of a distributed system may change the behavior of that system. For some parallel programs, different executions with the same data will result in different results even without any attempt to observe the behavior. Even when the behavior can be ...

82 [A design flow for partially reconfigurable hardware](#)

Ian Robertson, James Irvine

May 2004 **ACM Transactions on Embedded Computing Systems (TECS)**, Volume 3 Issue 2

Full text available: pdf(698.30 KB)

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This paper presents a top-down designer-driven design flow for creating hardware that exploits partial run-time reconfiguration. Computer-aided design (CAD) tools are presented, which complement conventional FPGA design environments to enable the specification, simulation (both functional and timing), synthesis, automatic placement and routing, partial configuration generation and control of partially reconfigurable designs. Collectively these tools constitute the dynamic circuit switching CAD f ...

Keywords: FPGA, Viterbi decoder, configuration control, dynamically reconfigurable logic (DRL), power estimation, run-time reconfiguration (RTR)

83 [Session 1 \(full technical papers\): evolution in source code: A method for detecting faulty code violating implicit coding rules](#)

Tomoko Matsumura, Akito Monden, Ken-ichi Matsumoto

May 2002 **Proceedings of the international workshop on Principles of software evolution**

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181 [Enabling trusted software integrity](#)

Darko Kirovski, Milenko Drinić, Miodrag Potkonjak

 October 2002 **Proceedings of the 10th international conference on Architectural support for programming languages and operating systems**, Volume 37, 30, 36 Issue 10, 5, 5

 Full text available: pdf(1.39 MB) Additional Information: [full citation](#), [abstract](#), [references](#)

Preventing execution of unauthorized software on a given computer plays a pivotal role in system security. The key problem is that although a program at the beginning of its execution can be verified as authentic, while running, its execution flow can be redirected to externally injected malicious code using, for example, a buffer overflow exploit. Existing techniques address this problem by trying to detect the intrusion at run-time or by formally verifying that the software is not prone to a p ...

182 [The design of a portable scientific tool: a case studying using SnB](#)

Steven M. Gallo, Russ Miller, Charles M. Weeks

 November 1996 **Proceedings of the 1996 ACM/IEEE conference on Supercomputing (CDROM)**

 Full text available: pdf(278.57 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Developing and maintaining a large software package is a complex task. Decisions are made early in the design process that affect i) the ability of a user to effectively exploit the package and ii) the ability of a software engineer to maintain it. This case study discusses issues in software development and maintainability of a scientific package called SnB, which is used to determine molecular crystal structures. The design of the user interface is discussed along with important software ...

183 [Posters & demos: Using multimodal interaction to navigate in arbitrary virtual VRML worlds](#)

Frank Althoff, Gregor McGlaun, Björn Schuller, Peter Morguet, Manfred Lang

 November 2001 **Proceedings of the 2001 workshop on Percetive user interfaces**

 Full text available: pdf(1.82 MB) Additional Information: [full citation](#), [abstract](#), [references](#)

In this paper we present a multimodal interface for navigating in arbitrary virtual VRML worlds. Conventional haptic devices like keyboard, mouse, joystick and touchscreen can freely be combined with special Virtual-Reality hardware like spacemouse, data glove and position tracker. As a key feature, the system additionally provides intuitive input by command and natural speech utterances as well as dynamic head and hand gestures. The

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Hong Hua; Yongtian Wang; Dayuan Yan;

Instrumentation and Measurement, IEEE Transactions on , Volume: 51 , Issue: 2 , April 2002

Pages:362 - 367

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2 A time redundancy approach to TMR failures using fault-state likelihood
Shin, K.G.; Hagbae Kim;

Computers, IEEE Transactions on , Volume: 43 , Issue: 10 , Oct. 1994

Pages:1151 - 1162

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Skinner, S.R.; Steck, J.E.; Cruz-Cabrera, A.A.; Mingtao Yang; Behrman, E.C.;

Neural Networks, 1999. IJCNN '99. International Joint Conference on , Volume: 4 , 10-16 July 1999

Pages:2351 - 2356 vol.4

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Behringer, R.; V. Holt, V.; Dickmanns, D.;

Intelligent Vehicles '92 Symposium., Proceedings of the , 29 June-1 July 1992

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